

What is claimed is:

1. A color CRT comprising:

a panel having a substantially flat outer surface and an inner surface  
5 having a predetermined curvature;

a funnel coupled to a rear surface of the panel; and

a reinforcing band coupled to a skirt portion of the panel in order to  
prevent an explosion of the panel and the funnel;

wherein an aspect ratio of an effective surface of the panel is 4:3 and a  
10 following condition  $0.0426 \cdot U^2 - 46.848 \cdot U + 14095 \leq T \cdot W \cdot Y_p \leq 0.0381 \cdot U^2 -$   
 $35.517 \cdot U + 9994.1$  is satisfied;

wherein U denotes a diagonal size of the effective surface of the panel, T  
denotes a thickness of the reinforcing band, W denotes a width of the reinforcing  
band, Yp denotes a yield strength of the reinforcing band, and  $T \cdot W \cdot Y_p$  denotes  
15 a band force F of the reinforcing band.

2. A color CRT comprising:

a panel having a substantially flat outer surface and an inner surface  
having a predetermined curvature;

20 a funnel coupled to a rear surface of the panel; and

a reinforcing band coupled to a skirt portion of the panel in order to  
prevent an explosion of the panel and the funnel;

wherein an aspect ratio of an effective surface of the panel is 16:9 and a  
following condition  $2.3333 \cdot U + 252 \leq T \cdot W \cdot Y_p \leq 7 \cdot U - 2268$  is satisfied,

25 wherein U denotes a diagonal size of the effective surface of the panel, T

denotes a thickness of the reinforcing band,  $W$  denotes a width of the reinforcing band,  $Y_p$  denotes a yield strength of the reinforcing band, and  $T \cdot W \cdot T \cdot Y_p$  denotes a band force  $F$  of the reinforcing band.

5            3.        The color CRT of claim 1, wherein a following condition  $0.03 \leq (R_h \cdot R_v \cdot R_o)/U \leq 0.12$  is satisfied,

             wherein the  $R_h$  is a value obtained by dividing an inner curvature radius  $R_x$  of the effective surface of the panel along the long axis  $X$  by  $1.767 \cdot a$  size  $L_x$  of the effective surface along the long axis, the  $R_v$  is supposed to be a value  
10        obtained by dividing an inner curvature radius  $R_y$  of the effective surface of the panel along the short axis  $Y$  by  $1.767 \cdot a$  size  $L_y$  of the effective surface along the short axis, and the  $R_o$  is supposed to be a value obtained by dividing an inner curvature radius  $R_d$  of the effective surface of the panel along the diagonal axis  $D$  by  $1.767 \cdot a$  size  $L_d$  of the effective surface along the diagonal axis.

15            4.        The color CRT of claim 1, wherein a following condition  $1.0 \leq T \leq 1.8$  is satisfied.

             5.        The color CRT of claim 2, wherein an embossment is formed at  
20        one side of the reinforcing band corresponding to a mold match line of the panel.

             6.        The color CRT of claim 2, wherein a following condition  $0.03 \leq (R_h \cdot R_v \cdot R_o)/U \leq 0.12$  is satisfied.

25            7.        The color CRT of claim 2, wherein a following condition  $1.0 \leq T \leq$

1.5 is satisfied.

8. The color CRT of claim 1, wherein an embossment is formed at one side of the reinforcing band corresponding to a mold match line of the panel.

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